STEYOHEN, VA.

PHASE I BOOK EXPLOITATION 626

Akademiya nauk SSSR. Energeticheskiy insitut

Issledovaniya protsessov goreniya; sbornik statey po rabotam, vypolnennym v Energeticheskom institute im. G.M. Krzhizhanovskiy AN SSSR (Study of Combustion Processes; Collection of Articles on Work Done by the Power Institute imeni G.M. Krzhizhanovskogo AS USSR) Moscow, Izd-vo AN SSSR, 1958. 123 p. 3,300 copies printed.

Resp. Ed.: Khitrin, L.N., Corresponding Member, AS USSR; Ed. of Publishing House: Pobedimskiy, V.V.; Tech. Ed.: Polesitskaya, S.M.

PURPOSE: This book is meant for scientists and engineers working in the field of fuel combustion.

COVERAGE: This collection of articles represents recent research in the field of combustion processes performed at the Institute of Power Engineering imeni G.M. Krzhizhanovskiy, AS USSR. Materials studied were gaseous and vapor fuels. Problems considered were:

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Study of Combustion Processes (Cont.) 626

ignition of gaseous mixtures and stabilization of the flame front; conditions for igniting homogeneous mixtures; performance of a tunnel burner; booster method for tunnel burners, in particular for the burning of gases with low calorific values; regularities of flame propagation in laminary and turbulent flows; effect of preheating and fuel composition on the rate of flame propagation; heat-engineering calculations of processes in furnaces, boilers, and other devices, and methods for the estimation of their performance. A new photopyrometric method is described which serves for measuring the temperature of burning-coal particles in motion.

TABLE OF CONTENTS:

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Khitrin, L.N. and Gold'denberg, S.A. (Laboratory for the Intensification of Furnace Processes) Ignition of Gaseous Mixtures and Critical Characteristics 5

The authors based their research on the assumptions of Ya. B. Zel'dovich for the determination of ignition characteristics, such as: concentration limits, boundary flame velocities and flame stabilization criterion. Heated rods or spheres were used as ignition sources. N.N. Semenov [Ref. 2] and L.A. Vulis [Ref. 4] are also mentioned as contributors to combustion theory. The activation energy for methane-air mixture (E=35000) is quoted from the work of V.I. Andreyev and L.A Volodina [p. 36]. There are 9 figures, 14 equations, and 4 Soviet references.

Iyevlev, V.N. and Solov'yeva, L.S. (Laboratory for the Intensification of Furnace Processes). Experimental Study of Gas Combustion Processes in Tunnel Burners 14

The authors demonstrate that combustion in a tunnel is similar to combustion in a free turbulent flow. The tunnel appears not to have an essential effect on the combustion process, but is a good, convenient flame front stabilizer. The characteristics derived by the authors can be useful in calculations of premixer gas burners. There are 7 figures and 3 Soviet references.

Speysher, V.A. (Laboratory for the Intensification of Furnace Processes). Limit-pressure Tunnel Burners Operating on Low-calory gases 23

Experimental data show that a primix tunnel burner is effective in stabilizing the ignition of gas-air mixtures. This is true for small caliber tunnels (D_T = 48 mm) with producer gas and for larger tunnels (D_T= 550 mm) with gas from underground gasification. There are 3 figures and 2 Soviet references.

Speysher, V.A. and Andreyev, V.I. (Laboratory for the Intensification of Furnace Processes). Effect of Preheating

The authors studied the ignition stability of preheated hydrogen-air mixtures (200 and 390° C). Considerable widening of the ignition stability range was observed at higher initial temperatures of the mixture, whereby lower calorific values were permissible. There are 3 figures and no references.

The authors studied the effect of a bluff body in a flow of combustible gases. A conical insert with mixer (fan) was placed in the center of the burner nozzle. A threefold to fourfold intensification of the combustion process was

obtained for low-calory gases (from underground gasification). A comparative study of various types of inserts was made by V.N. Iyevlev and L.S. Solov'yeva. Their results are given in table 1. There are 4 figures, 1 table, and 2 Soviet references.

Volodina, L.A. and Andreyev, V.I. Effect of Air Preheating on Flame Stabilization by Bluff Bodies in an Open Flow 36

The authors studied flame stabilization of a methane-air mixture with air preheated to 400°. Cones of stainless steel, 5, 7, and 9 mm in diameter, were used as stabilizers. Results are in agreement with those obtained by Longwell [Ref. 1] and Dezubay [Ref. 2]. There are 2 figures and 2 U.S. references. It was observed that preheating the air component widened the stabilization limits considerably in poor mixtures, and insignificantly in rich mixtures.

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Khitrin, L.N. and Gol'denberg, S.A. (Laboratory for the Intensification of Furnace Processes). Effect of Preheating the Combustible Mixture and of the Ambient Pressure on Flame Stabliziation Limits 39

The authors studied the effect of the initial temperature and of pressure on flame stabilization. Experimental data are given from the work of L.A. Volodina and V.I. Andreyev at the Power Engineering Institute, AS USSR. There is good agreement of experimental data with theoretical computations. Certain deviations are due to the characteristics of the stabilizers used. The stability parameters are derived from the fuel to air ratio $\left(\frac{F}{A}\right)$ according to Longwell [Ref. 10] and Friedman [Ref. 11]. There are 3 figures, 12 equations, and 13 references, 4 Soviet, and 9 English.

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Study of Combustion Processes (Cont.) 626

The authors studied the effect of pressure on flame velocity for gasoline-air and methane air mixtures. Experiments were conducted with a burner of d=16 mm and d= 12 mm, with a peripheral ignition source, and constant Reynolds number 1700. Pressure was varied from 760 - 100 mm. Results obtained were: for methane $U \simeq \frac{1}{\sqrt[3]{P}}$, and for gasoline $U \simeq \frac{1}{\sqrt[4]{P}}$.

There are 7 figures, 1 table, and 34 references, 10 of which are Soviet, 20 English, 3 German, and 1 French.

Gol'denberg, S.A. and Pelevin, V.S. (Laboratory of Combustion Physics). Effect of Pressure on the Flame Propagation Velocity in a Turbulent Flow 68

This study is based on the experimental work of the authors. The pressure dependence of flame propagation velocity was studied by means of a burner with d = 16 mm andlength assuring stabilization. A gasoline-air mixture was used at pressures of 760 - 100 mm and Reynolds numbers $4 - 20 \cdot 10^3$. It was determined that

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for a constant mass velocity (Re = const.) and varying pressure, the turbulent flame velocity increases according to the law $U_T \simeq \frac{1}{p^{\frac{1}{4}}}$ analogous to the variation of normal flame velocity.

The turbulent flame velocity decreases with the drop in pressure $U_T \simeq p^{\frac{1}{2}}$ at a constant flow velocity. When conditions approximate isotropic turbulence, viscosity of the medium is the main factor modifying the flame propagation velocity at variable pressures. There are 12 figures and 4 references, 3 Soviet and 1 German.

Khitrin, L.N., Golovina, Ye. S. and Sorokina, A.V. (Laboratory of Combustion Physics). Effect of Preheating the Gasoline-air Mixture on the Flame Propagation Velocity.

The authors studied the effect of preheating the fuel mixture on the flame propagation velocity in laminar and turbulent flows. The temperature of the mixture was varied from 17 to 227°C.

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It was established that the effect of preheating on the flame propagation velocity is the same in turbulent and laminar flows. There are 7 figures and no references.

Tsukhanova, O.A. (Laboratory for the Intensification of Furnace Processes). Calculation of the Summary Reaction Rate and Flame Velocity in Gas Mixtures 81

The object of this study is the development of approximation methods for the calculation of the total reaction rate without restricting the order of reaction. The normal flame speed theory of Ya. B. Zel'-dovich, N.N. Semenov, and D.A. Frank-Kamenetskiy was taken as the base for this work. The author gives the equation for the total reaction rate, the equation for normal combustion and its approximate solution, and calculation of the kinetics of CO-air and CO-oxygen combustion with a comparative table of results by various authors (table 1). These data are compared with results of N.A. Karzhavina (fig. 2). Finally, the calculation of flame propagation velocities

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for its determination 91

The heating values of carbon, hydrogen, and hydrocarbon fuels are discussed in this article. The author points out [illegible] results for carbon (in the form of graphite) and molecular hydrogen, considering their heating values and the theoretical volumes of the combustion products. Formulas are given in simplified form for gaseous and liquid fuels, solid fuels with 0-40% moisture, and various types of fuels in combustion with excess of air. There are 2 figures, 4 tables, and 4 Soviet references.

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Study of Combustion Processes (Cont.) 626

Ravich, M.B. (Laboratory for the Intensification of Furnace Processes). Methods for the Computation of Flue-Gas Loss Due to Incomplete Combustion from the Composition of Combustion Products 97

The author discusses the possibility of calculating the heat losses through flue gases by a simplified method using data on the composition and temperature of combustion products. Formulas are given for the flue-gas loss and for the gasification efficiency. There is 1 table, and 1 Soviet reference.

Ravich, M.B. (Laboratory for the Intensification of Furnace Processes). Classification of Fuels by Their Thermal Properties 100

Tables are given for certain thermal characteristics of fuels which are divided into two main classes. The first contains fuels with heating values that are higher than 2000°. The second class

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contains fuels with heating values lower than 2000°,and mostly below 1700°. There are 2 tables and no references.

Ravich, M.B. (Laboratory for the Intensification of Furnace Processes). Methods for the Computation of the Excess-oxygen Coefficient During the Combustion of Fuels in an Atmosphere of Oxygen and Oxygen-nitrogen Mixtures 103

This paper describes the calculation of the coefficient of excess oxygen (α) from the analysis of combustion products without the preliminary determination of the percentage of oxygen in the feed blast. Data are given for various Soviet fuels. There are no references.

Popov, V.A. (Laboratory for the Intensification of Furnace Processes). Measuring the Temperature of Burning Fuel Particles in Motion 106

Study of Combustion Processes (Cont.) 626

The author presents a photopyrometric method for the determination of temperatures of the combustion process. He believes that this particular method has not been applied elsewhere. The modification of the photometric method is based on two factors: 1) the moving object is photographed by means of a film moving at a given speed, 2) calibration of the standard is performed on a film moving at identical speed with the observation film. It is imperative to keep exposure conditions identical for both instances. Film used was type D with sensitiveness 350° GOST (8000° Kh and D.) Developer used was NIKFI-1. Results showed that the temperature of particles varied from 885 to 925° C, which is in agreement with physicochemical calculations. There are 5 figures, 2 tables, and no references.

Sobolev, G.K. (Laboratory for the Intensification of Furnace Processes). Optical Measurement of Combustion Temperatures in Mixtures of Air with Carbon Monoxide and Methane. 110

This paper discusses the optical measurement of flame temperatures in a given flame zone. The technique of NaCl dust injection into

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the stream was used for temperature determination by the sodium D- line reversal method. The optical arrangement ordinarily used in such cases is described in the 1952 book Metody izmereniya temperayur v promyshlennosti edited by A.N. Gordov. An LT-2 comparison lamp was used, and the combustion products were analyzed by means of the VTI gas analyzer. The temperature of combustion products in the methane-air mixture was estimated as equal to the theoretical combustion temperature. It was measured at 2-3 mm from the flame front. The temperature of combustion products of carbon monoxide at 4-6 mm from the flame front was considerably lower than the thermodynamic equilibrium temperature, but fairly close to the temperature calculated from the composition of reaction products in the studied flame zone. There are 2 figures and no references.

Blinov, V.I. and Khudyakov, G.N. (Laboratory for the Intensification of Furnace Processes). Certain Regularities in the Combustion of Petroleum Products in Containers 113

The combustion of automobile gasoline, kerosine, solar oil, Diesel oil, transformer oil, petroleum, and mazut was studied in burners and containers of various dimensions. Their combustion characteristics are given in table 1. Data for a

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Study of Combustion Processes (Cont.) 626

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652710005-4"

container with d = 22.9 m were supplied by the Central Scientific Research Institute of Fire Prevention (TsNIIPO), and for d= 1.3 and 2.6 m were prepared by the authors in collaboration with workers of the TsNIIPO. It was shown that combustion of petroleum products in containers with d= 1 m is turbulent, and tis velocity, and evidently the relative flame height, do not change with varying diameters. It can be assumed that the rate of turbulent combustion of liquids is determined by the amount of radiation heat obtained from the flame. This amount differs for different sections of the fuel surface. L.A. Volodin and A.A. Koryakin cooperated in the collection of experimental data. There are 2 figures, 4 tables, and 4 Soviet references.

Tsukhanova.O.A. (Laboratory for the Intensification of Furnace Processes). Solution of Certain Problems of Heterogeneous Combustion by the Method of Averaging of Equations 119

The author discusses the application of the method of averaging to the problem of combustion in a carbon channel for the simplest case of oxygen reaction at the wall to CO_2 and without considering

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12-3-58

SPITSHER, V. M.

PHASE I BOOK EXPLOITATION 1112

Nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti. Tsentral'noye upravleniye. Sektsiya gazifikatsii

Teoriya i praktika szhiganiya gaza; trudy nauchno-tekhnicheskogo soveshchaniya (Theory and Practice of Gas Combustion; Transactions of a Scientific and Technical Meeting) Leningrad, Gostoptekhizdat, 1958. 343 p. 3,500 copies printed.

Ed.: Lyakhovskiy, D.N.; Executive Ed.: Fedotova, M.I.; Tech. Ed.: Yashchurzhinskaya, A.B.

PURPOSE: This book is intended for scientists, designing organizations, heat and power engineers, and workers in the gas industry and in enterprises using gas fuel.

COVERAGE: This volume contains reports and addresses presented at the Scientific-Technical Conference on the Theory and Practice of Gas Combustion. The reports deal with the physics of gas fuel combustion, the construction and operation of gas burners and the practical use of gas fuel in industrial and power plants. References are given at the end of each article.

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TABLE OF CONTENTS:

SOV/137-59-2-2242

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 2, p 3 (USSR)

AUTHORS: Speysher, V. A., Andreyev, V. I.

TITLE: Effect of Preheating of Gas-air Mixtures on the Stability of Ignition in Tunnel Burners (Vliyaniye podogreva gazovozdushnykh smesey na ustoychivost' zazhiganiya v tunnel'nykh gorelkakh)

PERIODICAL: V sb.: Issled. protsessov goreniya. Moscow, AN SSSR, 1958, pp 27-30

ABSTRACT: The authors investigated the range of stability of the ignition of preheated gas-air mixtures in tunnel burners on a large laboratory apparatus by the method of a slow (incremental) approach to the preseparation conditions with periods sufficiently long for the establishing of a constant tunnel temperature at each intermediate step. Mixtures containing 99% CH_4 and 99% H_2 were heated to 100, 200, 300 and 400°C. At the maximum preheating of the mixture the limiting excess-air factor increases by 100-150%.

N. V

Card 1/1

SOV/137-59-1-71

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 9 (USSR)

AUTHORS: Iyevlev, V. N., Speysher, V. A.

TITLE: Intensification of Combustion in Tunnel Burners (Intensifikatsiya goreniya v tunnel'nykh gorelkakh)

PERIODICAL: V sb.: Issled. protsessov goreniya. Moscow, AN SSSR, 1958, pp 31-35

ABSTRACT: An appreciable shortening of the flame in tunnel burners can be achieved by installing a non-streamlined axially-symmetrical body close to the combustion-zone crater. In burning city gas in a burner with a crater 90 mm in diameter and a tunnel 260 mm in diam the installation of a smooth hollow cone 60 mm in diam on the axis of the jet shortens the flame by 66% and increases the heat liberation from 14 to 43 kcal/m^3 hour. The highest liberation of heat and the least increase in resistance are achieved when the cone is in the optimum position. Conical insertions with turbulence-stimulating blades proved still more effective. The liberation of heat increases by 600 and more percent.

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G. G.

Spryshev, I.A.

PHASE I BOOK EXPLOITATION SOV/3407

Akademiya nauk SSSR. Energeticheskiy institut im. G.M. Krzhizhanovskogo

Problemy energetiki; sbornik posvyashchayetsya akademiku G.M. Krzhizhanovskomu (Problems of Power Engineering; Collection of Articles Dedicated to Academician G.M. Krzhizhanovskiy) Moscow, 1959. 851 p. Errata slip inserted. 2,500 copies printed.

Eds. of Publishing House: B.D. Antrushin, P.V. Dubkov, P.I. Zubkov, and S.M. Moyzhes; Tech. Ed.: T.A. Prusakova; Editorial Board: A.V. Vinter, Academician (Deceased), V.I. Popkov (Resp. Ed.) Corresponding Member, Academy of Sciences USSR, V.I. Veyts, A.S. Predvoditelev, M.A. Styrikovich, Z.F. Chukhanov, N.B. Bogdanova, Candidate of Technical Sciences, B.K. Kozlov, Candidate of Technical Sciences, M.M. Lebedev, Candidate of Technical Sciences, and I.N. Bundukov.

PURPOSE: This collection of articles is intended as a tribute to the memory of Academician G.M. Krzhizhanovskiy.

COVERAGE: The collection contains sixty articles by former students and coworkers of the deceased Academician. The articles deal with problems of a wide range of subjects in the field of power engineering: problems of the regional development of electrical and thermal power engineering, power engineering technology, and the physics of combustion. No personalities are mentioned. References are given after most articles.

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SPEYSHER, VLADIMIR Anatol'yevich; KHITRIN, L.N., red.; SHUKHER, S.M., red.; LARIONOV, G.Ye., tekhn.red.

[Burning of natural gas in industry and at electric power plants] Szhiganie gaza na elektrostantsiiakh i v promyshlennosti. Pod red. L.N.Khitrina. Moskva, Gos.energ.izd-vo, 1960. 198 p.
(MIRA 14:3)

1. Chlen-korrespondent Akademii nauk SSSR (for Khitrin).
(Gas, Natural)

SPEYSHER, V.A.; ANDREYEV, V.I.; SHIMANOVSKIY, O.V.

Powerful tunnel-type burner for the combustion of low-calorific power gases. Gaz.prom. 5 no.7:20-26 '60. (MIRA 13:7)

(Gas burners)

BUZNIKOV, Yevgeniy Fedorovich; RODDATIS, Konstantin Fedorovich; SPEYSHER, Vladimir Anatol'yevich; KHITRIN, L.N., red.; MURZAKOV, V.V., red.

[Conversion of DKV and DKVR boilers to gas operation] Perevod kotlov DKV i DKVR na gazoobraznoe toplivo. Moskva, Energiia, 1964. 190 p. (MIRA 17:12)

1. Chlen-korrespondent AN SSSR (for Khitrin).

AVDEYEVA, A.A., inzh.; SPEYSHER, V.A., kand. tekhn. nauk, red.; SOBOLEVSKAYA, L.A., red.

[Methods and control of gas combustion in electric power plants] Metody i kontrol' szhiganiia gaza na elektrostantsiiakh. Moskva, Energiia, 1965. 143 p. (MIRA 18:7)

1. ORGRES, trust, Moscow.

Sopeyl, Yu. A.

3(5) PHASE I BOOK EXPLOITATION SOV/2172

Akademiya nauk SSSR. Mezhduvedomstvennaya postoyannaya komissiya po zhelezu

Zhelezorudnyye mestorozhdeniya Altaye-Sayanskoy gornoy oblasti, tom. 1, kniga. 1: Geologiya (Iron Ore Deposits of the Altay-Sayan Mountain Region, Vol 1, Book 1: Geology) Moscow, 1958. 330 p. (Series: Zhelezorudnyye mestorozhdeniya SSSR) Errata slip inserted. 2,500 copies printed.

Additional Sponsoring Agencies: Akademiya nauk SSSR. Sibirskoye otdeleniye, USSR. Gosudarstvennaya planovaya komissiya. Glavnoye upravleniye nauchno-issledovatel'skikh i proyektnykh organizatsiy, Institut Giproruda, USSR. Ministerstvo geologii i okhrany nedr, USSR. Zapadno-Sibirskoye geologicheskoye upravleniye, USSR. Krasnoyarskoye geologicheskoye upravleniye, Sibirskiy geofizicheskiy trest, Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.

Eds. of the vol.: P. Ye. Sledzyuk, and G.A. Sokolov; Resp. Ed. of Series: I.P. Bardin, Academician; Scientific Eds.: I.P. Bardin, Academician, T.F. Gorbachev, A.L.Dodin, N.A. Yerofeyev, A.S. Kalugin, N.N. Nekrasov, G.L. Pospelov, M.L. Skobnikov, P. Ye. Sledzyuk, S.S. Smirnov-Verin (Deceased) G.A. Sokolov, S.G. Strumilin, Academician, V.B. Khlebnikov, N.A. Chinakal, and I.S. Shapiro;

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Iron Ore Deposits (Cont.) SOV/2172

Ed. of Publishing House: I.G. Kudasheva; Tech. Ed.: I.F. Kuz'min.

PURPOSE: This book is intended for structural, exploration and mining geologists, for geophysicists and mineralogists, and industrial planners.

COVERAGE: This work purports to be the first attempt to review and summarize all the material that has been published on the iron-ore deposits of the Altay-Sayanskaya oblast' during the last 20 years. This area, the work reports is fast becoming one of the most important iron-ore bases in the Soviet Union. The book discusses the economic aspects of the geography and geology of the individual deposits, presents a qualitative and quantitative (as of January 1, 1957) analysis of ore reserves, and evaluates the prospects and possibilities of further development of the Altay-Sayanskaya iron-ore base. The genetic characteristics of iron-ore mineralization of the area are described. Extensive information on the geology of individual deposits, complexes, and regions is provided, and a general genetic description of ore mineralization in the Altay Sayanskaya region is given. There is a historical account of the exploration and development of the region, and of the development of concepts on the genesis of mineralization in the area. The following scientists participated in the preparation and writing of this volume: G.L. Pospelov, S.S. Lapin, N.Kh. Belous,

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V.M. Klyarovskiy, O.G. Kine, and V.A. Vakhrushev of the West Siberian Branch of the AN SSSR, I.S. Shapiro of the Permanent Interdepartmental Committee on Iron, A.S. Kalugin, A.S. Mukhin, N.A. Garnets, Yu. A. Speyt, M.I. Selivestrova, V.G. Rutkevich, G.P. Bykov, N.I. Nikonov, and K.G. Sakovich of the West Siberian Geological Administration V.I. Medvedkov, A.S. Aladyshkin and F. Ya. Pan of the Krasnoyarsk Geological Administration, M.G. Rusanov, E.A. Yazbutis, Yu. V. Rozhdestvenskiy, G. Ye. Savitskiy, and A.D. Prodanchuk of the West Siberian Geological Survey Chermetrazvedka Trust, P.A. Lysenko, T.I. Lebedev, T.Ya. Kamenskaya, A.I. Maslennikov and R. Pipar of the Siberian Geophysical Trust, A.L. Dodin of the VSEGEI, A.S. Mitropol'skiy of the Mining Expedition, V.A. Lukin of the Mining Administration of the Kuznetsk Metallurgical Combine, S.S. Zimin of the Tomsk Polytechnic Institute, I.V. Derbikov of the Sibneftegeofizika Trust, and V.G. Korel' of the Siberian Metallurgical Institute. There are 103 diagrams including insert maps and 10 tables. There are 271 references, all Soviet.

TABLE OF CONTENTS:

SELIVERSTOVA, M.I., KOMAROV, A.M., SPEYT, Yu.A.

Ina iron ore deposit in the Altai. Sov. geol. 3 no.7:121-122 Jl '60. (MIRA 13:8)

1. Inskaya geologorazvedochnaya partiya.
(Ina Valley--Iron ores)

TUNITSKIY, N.N.; SPEZHAKOVA, G.Ye.

Effect of H^2 excitation on the cross-section of ionic-molecular reaction $H_2^+ + H_2 \rightarrow H_3^+ + H$. Kin.i kat. 6 no.3:563 My-Je '65. (MIRA 18:10)

1. Fiziko-khimicheskiy Karpova.

[illegible], G.I.; [illegible], B.M., [illegible], K.P.

Ionic-molecular reactions in hydrogen and in a hydrogen-helium mixture. Zhur. fiz. khim. 39 no.8:2002-2008 Ag '65.
(MIRA 18:9)

1. Moskovskiy fiziko-khimicheskiy institut imeni Karpova.

SPICAK, K.

3008

Chem

Tridymite silica and the possibilities of its production. R. Bárta and K. Spicák (*Ruda. List.*, 1955, 10, 709—715).—Advantages of tridymite silica over the crystobalite form are discussed, with particular reference to temperature-dependent properties (such as expansion) and suitability for bricks for lining furnaces. Four methods of manufacture are investigated, viz., (1) "tridymitization" of crystobalite SiO_2; (2) use of additives to produce artificial or "black" SiO_2; (3) use of special naturally occurring siliceous materials containing Fe; (4) addition of Fe and non-Fe catalysts, and bentonite. Properties such as density, heat resistance, linear expansion (temporary, as a result of heating, and permanent), porosity, and strength (in cold) of the different preparations are examined.

A. O. JAKUBOVIC.

SPICAK, Josef

Penalty records on punched cards. Podn org 1: no.3:128-129 Mr '65.

1. Koh-i-noor, Decin.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application. Ceramics. Glass. Binding Materials. Concrete. H-13

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2022.

Author : Barta, R., Spicak, K., Bartuska, M.
Inst : Not given.
Title : High Quality Dinas.

Orig Pub: Hutnicke listy, 1956, 11, Mo. 9, 553-556.

Abstract: See also R. Zh. Met., 1956, 990.

Card 1/1

BARTA, Rudolf, prof., inz., doktor technickych ved; RUZEK, Josef; SPICAK, Karel, inz.

Highly mullitized chamotte. Sbor chem tech no.3, part 1:501-505 '59.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka, Praha.

SPICAK, Karel, inz.

Generation of the A3J signal by the phasing method. Sdel tech 10 no.10:370-373 O '62.

SPICAK, V.; SUBRT, F.

Effect of apigenin on histamine liberation. Cesk. fysiol. 7 no.3: 263-264 May 58.

1. Katedra farmakologie a pokusne fysiologie fakulty detskeho lekarstvi, Farmakologicka laborator chemickeho ustavu CSAV, Praha.

(PLANTS,
chamonile tincture apigenin, eff. on histamine liberation (Cz))
(HISTAMINE, physiol.
liberation, eff. of chamonile tincture apigenin (Cz))

BEISKA, Marie; SPICAK, Valav

Treatment of bronchial asthma with new synthetic corticoids. Cesk. pediat. 13 no.7:610-613 Aug 58.

1. I. detska klinika, prednosta prof. MUDr. J. Svejcar Farmakologicky ustav, prednosta prof. MUDr. H. Raskova. M. B. I. det. klinika, Praha 2, Sokolska 2.

(ASTHMA, in inf. & child
ther., prednisone, statist. (Cz))
(PREDNISONE, ther. use
asthma in child., statist. (Cz))

SPICAK, Vaclav; BELSKA, Marie

Bronchial asthma in children. Cesk.pediat.15 no.6/7:598-603 Jl'60.

1. I. detska klinika FDL v Praze, prednosta prof.dr. J.Svejcar.
(ASTHMA in inf & child)

BELSKA, Marie; SPICAK, Vaclav

Asthma bronchiale in childhood. Cesk.pediat.15 no.6/7:610-613 Jl'60.

1. I. detska klinika KU v Praze, prednosta prof.dr. Josef Svejcar.
(ASTHMA in inf & child)

SPICAK, Vaclav; BELSKA, Marie

Effect of phenothiazine derivatives on allergic manifestations.
Cesk.pediat.15 no.6/7:648-650 J1'60.

1. I. detska klinika FDL v Praze, prednosta prof.dr. J.Svejcar.
(ALLERGY exper)
(PHENOTHIAZINES pharmacol)

MACEK, M.; KURES, H.; VEJMOLOVA, J.; SPICAK, V.

Some aspects of the examination of pulmonary elasticity in asthmatic children. Cesk. pediat. 17 no.5/6:406-408 Je '62.

1. Katedra nemocnicni pediatrie fakulty detskeho lekarstvi University Karlovy v Praze, vedouci prof. MUDr. J. Svejcar, DrSc. Odd. telovychovneho lekarstvi, vedouci MUDr. M. Macek, CSc.

(LUNGS physiol) (ASTHMA in inf & child)

SVEJCAR, J.; SPICAK, V.; BELSKA, M.

Development of the asthmatic reaction in children. Cas. Lek. Cesk. 101 no.15:455-459 13 Ap '62.

1. I detska klinika KU v Praze, prednosta prof. MUDr. J. Svejcar.

(ASTHMA in inf & child)

SPICAK,V.

Hormones, enzymes, mediators. Gesk. pediat. 19 no.4:300-305 Ap'64.

1. I.detska klinika fakulty detskeho lekarstvi KU v Praze; prednosta: prof.dr. J.Svejcar, DrSc.

[redacted], R.

Determining cost indicates the road to its lowering. p 5 (Rolnicke Hlasy Vol. 11, no. 1, Jan. 1957 Praha)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

SPICAR, R.

How to organize best the cooperation between collective and state farms.

p. 12 (ROLNICKE HLASY) Vol. 11, no. 11, Nov. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

NEDIVAL, A; ERMAN, D; SPICER, F.

Epidemic of typhoid fever in the hospital in Vinkovci during 1952-53. Higijena, Beogr. 6 no.3-4:261-272 '54.

1. Higijenski zavod, Osije, Opca bolnica, Vinkovci.
(TYPHOID FEVER, epidemiology,
epidemic in hosp.)

SPICER, Fric, dr.

Cases of benign leptospiroses in Vinkovci Hospital in 1953. Med. glasn. 8 no.10:365-367 Oct 54.

1. Interni odjel i Zarazni odjel Opce bolnice u Vinkovcima (sef dr. F.Spicer)
(LEPTOSPIROSIS, epidemiol.
Yugosl.)

SPICER, F., Dr.

Personal results in the treatment of abdominal typhus with chloromycetin. Higijena, Beogr. 8 no.2-3:172-178 1956.

1. General Hospital - Vinkovci.
(TYPHOID FEVER, ther.
chloramphenicol (Ser))
(CHLORAMPHENICOL, ther. use
typhoid fever (Ser))

SPICER, Fric, dr.

On the working capacity of patients with cardiovascular diseases.
Reumatizam 12 no.2:59-63 '65

1. Zavod za socijalno osiguranje SRH u Zagrebu.

L 32796-66
ACC NR: AP6023780 SOURCE CODE: YU/0015/65/000/04-/0116/0119

13

AUTHOR: Spicer, Fric (Doctor) B

ORG: Republic Institute of Social Insurance, Zagreb (Republicki savod za socijalno osiguranje)

TITLE: Chronic diseases as causes of permanently reduced working ability

SOURCE: Medicinski glasnik, no. 4-5, 1965, 116-119

TOPIC TAGS: medicine, industrial medicine

ABSTRACT: Comprehensive analysis of data on 7,512 persons examined for the purpose of determining the presence of medical indications for retirement: ages and sex distribution, qualifications of mental and physical workers involved; branches of occupational and professional activity; classification of frequency according to 15 disease groupings; types of disability confirmed. This article was presented at the III Congress of Croatian Physicians in Zagreb on 10 November 1964. The author thanks the Department of Disability Insurance and the Mechanograph Bureau of the Republic Institute of Social Insurance in Zagreb for the data on the numbers of disabled in Croatia for the first six months of 1964. Orig. art. has: 2 figures and 5 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004

Card 1/1 mjs 0915 1605

SPICER, Fric, dr.

Medical aspects of the determination of work capacity (disability). Lijecn. vjesn. 87 no.3:301-309 Mr. '65.

1. Iz VIII prvostepene invalidske komisije Republickog zavoda za socijalno osigurance u Zagrebu.

SPICHAK, M.

Protecting manual fire pumps from freezing. Pozh.delo 3 no.10:20 O '57. (MIRA 10:11)

1. Nachal'nik otryada kombinata "Dal'vostugol'," Raychikhinsk, Amurskaya oblast'.

(Pumping machinery)

SPICHAK, M

SPICHAK, M. (Raychikhinsk, Amurskaya oblast')

We must agree with it. Pozh.delo 3 no.12:9-10 D '57. (MIRA 10:12)
(Amur Province--Fire prevention)

AUTH: [illegible] K. I. 47/5e-5-9-11/11

TITLE: A Method for Recalculating the Average Salinity of the Sea of Azov (Metod rascheta sovremennogo raschota sredney solenosti Azovskogo morya)

PERIOD: Meteorologiya i gidrologiya, 1958, Nr 9, pp. 36-36 (USSR)

ABSTRACT: The annual fluctuations of the salinity of the Azovskoye more (Sea of Azov) affect the fisheries in these waters. Once salinity exceeds 12 ‰, valuable fish species decrease in numbers. This can lead to a considerable reduction in these fish populations. Therefore, the author proposes a method for recalculating the annual average salinity. This value is determined by the ratio of elements in the water:salt balance (= to 1). This balance is composed of: the inflow from rivers, atmospheric precipitation, the inflow from the Black Sea and from the rivers, on the positive side; and of evaporation, as well as of the outflow into the Black Sea and into the Sea, on the negative side. The data listed in table 1 [illegible] from the evaporation (x_1 km^3/year) [illegible] from the Black Sea (x_2 km^3/year) [illegible] compute for the salinity, if we assume that the

[illegible] for precalculating the average salinity of the Sea of Azov

Fluctuations in the average salinity are determined by the fluctuations in the values of the water balance, the decisive role of the inflow from the rivers will be seen. Whereas an annual inflow of 10 km³ from the Black Sea increases salinity by 0,2 ‰, an equivalent increase of the inflow from the rivers will lower salinity by 0,42 ‰. The relative influence of the inflow from the rivers increases with rising salinity, as the difference between the salinities of the waters of the Black Sea and of the Sea of Azov will decrease, whereas the difference between the salinities of the Azov and river waters will increase. Thus there is a possibility of approximately precalculating the average salinity from the inflow forecast and from the actual salinity during the preceding year. The error is 5 - 20 % of the calculation [illegible]. There are 1 table and 2 references, [illegible] which [illegible].

BORODATOV, V.A., kand.biolog.nauk; DEMIDOV, V.F.; DUKHANIN, A.N.; ZHUKOVA, A.I.; KADIL'NIKOV, Yu.V.; KARPECHENKO, Yu.L.; KORZHOVA, Yu.A.; MAKHOVER, Z.I.; PETROV, G.P.; PROSVIROV, Ye.S.; RULEV, N.N.; SOKOLOV, O.A.; SPICHAK, M.K.; KHROMOV, N.S.; SHUIN, V.I., red.; FORMALINA, Ye.A., tekhn.red.

[Study of tuna fish and sardines in the eastern part of the Atlantic Ocean; report on the cruise of the scientific fishery survey expedition of 1957] Issledovaniia tuntsa i sardiny v vostochnoi chasti Atlanticheskogo okeana; reisovyi otchet nauchno-poiskovoi ekspeditsii, 1957 g. Moskva, 1959. 158 p. (MIRA 13:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.
(Atlantic Ocean--Tuna fish) (Atlantic Ocean--Sardines)
(Fish, Canned)

SHELOMOV, I.K.; SPICHAK, M.K.

Reservoir influence on hydrological and hydrochemical conditions in the lower course of rivers. Dokl.AN SSSR 133 no.2:457-458 Jl '60. (MIRA 13:7)

1. Azovskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva, Rostov-na-Donu. Predstavleno akademikom N.M. Strakhovym.
(Don River--Water--Composition)
(Don River--Hydrology)
(Tsimlyansk Reservoir)

PANOV, D.G.; SPICHAK, M.K.

Rate of sediment accumulation in the Sea of Azov. Dokl.AN SSSR 137 no.5:1213-1213 Ap '61. (MIRA 14:4)

1. Azovskiy basseynovyy nauchno-issledovatel'skiy institut rybnogo khozyaystva. Predstavleno akademikom N.M.Strakhovym.
(Azov, Sea of—Sedimentation and deposition)

SHCHAK, M.K.

Conditions of the formation and characteristics of continental runoff and the salinity of the Sea of Azov. Trudy AzNIIRKH no.6:15-25 '63.

Elements of thermal balance and their role in the formation of the hydrometeorological regime and primary productivity of the Sea of Azov. Ibid.:27-31 (MIRA 17:8)

22682

P/034/60/000/012/002/004
D235/D302

24.5500(1643, 1164, 1395)

AUTHORS: Spichalski, Alojzy, Doctor of Technical Sciences, and Referowski, Ludwik, Master of Engineering

TITLE: The application range of a cross-coil dynamo-meter for temperature measurement in a 3 wire system

PERIODICAL: Pomiary, Automatyka, Kontrola, no. 12, 1960, 473-476

TEXT: The choice of parameters is discussed for a 3 wire temperature measuring circuit resistance thermometers. The parameters are chosen with a view to increasing sensitivity, compensation for ambient temperature changes and utilization of one scale for several ranges. The system under consideration is shown in Fig. 4 where R_o denotes nominal resistance of the thermometer. For small temperature changes the current ν is given by $\nu = \frac{i_o + i_d}{i_o - i_d}$ where i_d is the additional current due to the change of resistance ϵ in the thermometer. For the instrument as shown in Fig. 5, a typical value for ν is between 0.9 at α p and 1.1 at α k. The deflection

Card 1/7

The application range...

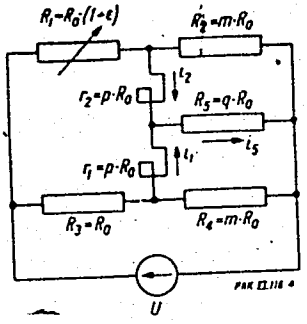

Fig. 4

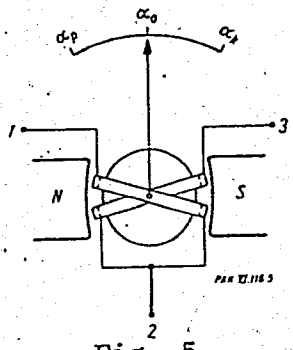

Fig. 5

of the pointer from position α_0 is proportional to the value of q (Fig. 4) and inversely proportional to the value of i_2. These values determine the sensitivity of the system. The ratio of i_1 to i_2 is given by

$$v = \frac{1 + \varepsilon \frac{m + p + q}{p(m + 1) + m}}{1 - \varepsilon \frac{q}{p(m + 1) + m}} \qquad (4)$$

Card 2/7

The application range...

and in the simplified form by $v - 1 = K_o \cdot \varepsilon (1 - \varepsilon D)$ (4a)
where K_o is the sensitivity index at α_o and given by

$$K_o = \frac{1 + \frac{2q}{m + p}}{1 + \frac{mp}{m + p}}$$

D-non-linearity index given by

$$D = \frac{q}{(m+p)^2} \frac{pm - q}{\left(1 + \frac{2q}{m+p}\right)\left(1 + \frac{pm}{m+p}\right)} \quad (4b)$$

ε - change of resistance in thermometer and is given by

$$\varepsilon = (v-1) \frac{1 + \frac{mp}{m+p}}{1 + q\frac{v+1}{m+p}} \quad (4c)$$

Parameters v_k and p are inherent to the design of the instrument.

Card 3/ 7

The application range...

Parameters m and q can be chosen to give the best possible performance at ε_k depending on the range of measured temperature. The choice of p and m will depend on: a) maximum current i_o'' through coils is limited by internal heating; b) minimum current i_o' to overcome friction if the voltage supply changes ± 20%; c) maximum permissible current through the thermometer - I_1''. For a given supply U, in conjunction with

$$\frac{U}{I_1 R_1} - 1 = \frac{m(2q+p)}{m+2q+p} = a \qquad (2a)$$

and

$$\frac{U}{i_o R_o} - 1 = \frac{1+m}{m}(2q+p) = b \qquad (3a)$$

$$a' = \frac{U}{I_1'' \cdot R_o} - 1; \quad b' = \frac{U}{i_o'' \cdot R_o} - 1; \quad b'' = \frac{U}{i_o' \cdot R_o} - 1 \qquad (5)$$

gives the working parameters for the system. Consequently m and q are determined from

$$m = \frac{a(b+1)}{b-a}; \quad q = \frac{a(b+1-p)}{2(a+1)} \qquad (6)$$

Card 4/7

The application range...

Fig. 7 gives the range of applications for a system referred to m and q coordinates. Particular points were calculated from

$$q_A=\frac{b'-p}{2};\quad q_B=\frac{b'-p+1}{2}\cdot\frac{a'}{a'+1}$$

$$q_C=\frac{b''-p+1}{2}\cdot\frac{a'}{a'+1};\quad q_D=\frac{b-p}{2};\quad q_E=\frac{a'-p}{2}$$

$$m_B=a'\frac{b'+1+\frac{p}{a'}}{b'-a'+\frac{p}{a'}};\quad m_C=a'\frac{b''+1+\frac{p}{a'}}{b''-a'+\frac{p}{a'}};\quad m_F=a'$$

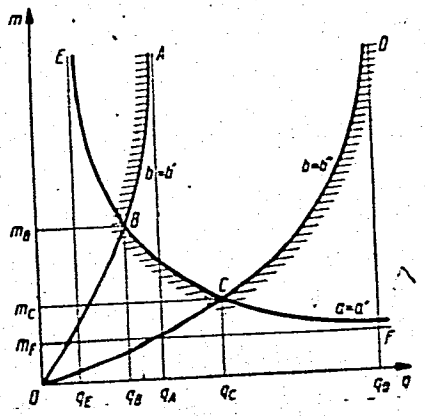

Fig. 7

Fig. 10 gives an example of nominal range as the function of q and m or $\varepsilon_k = f(q,m)$ for a particular case. In order to compensate for ambient temperature change, k must be equal to 1, where k is given by

$$k=\frac{p(1+m)+\frac{p\cdot m^2}{2\cdot q}}{p(1+m)+m} \qquad (10)$$

Card 5/7

The application range...

For the best linearity of the scale $\frac{q - p \cdot m}{(2q + p + m)^2} = \text{const}$ (12)

must be satisifed as closely as possible. The maximum range for the system is given by $\varepsilon_{k\,max} = (vk - 1)(1 + p)$. This can be achieved by increasing the value of $R_2 = R_4$ or adding additional resistors $r_{1d} = r_{2d}$ in series with the coils of the instrument. It is recommended that the resistance of the thermometer should be equal to that of coils for optimum performance. There are 11 figures and 3 Soviet-bloc references.

Card 6/7

31467
P/019/61/010/004/004/006
D265/D303

9.6180

AUTHOR: A. Spichalski

TITLE: Conditions for the optimum sensitivity of an unbalanced Wheatstone bridge

PERIODICAL: Archiwum elektrotechniki v. 10, no. 4, 1961, 877 - 889

TEXT: The range and accuracy of the measurements of non-electrical quantities such as temperature and strain depend on the sensitivity and linearity of the bridge parameters, whose choice is limited by the allowable current flowing through the detector resistance. The formula for the sensitivity of the bridge shown in Fig. 1 is derived from the first principles

$$K = \frac{U}{R_1 C_i (1 + m)\left(1 + n + p \frac{1 + m}{m}\right)} \qquad (4)$$

Card 1/4 3

31468
P/019/61/010/004/005/006
D265/D303

9.6180

AUTHOR: A. Spichalski

TITLE: Non-linearity of the characteristics of an unbalanced Wheatstone bridge

PERIODICAL: Archiwum elektrotechniki, v. 10, no. 4, 1961, 891-901

TEXT: After presenting the general theory of the Wheatstone bridge measurement of non-electrical quantites the author discusses the sensitivity and accuracy of galvanometer readings using the formula $\alpha = K \cdot \varepsilon (1 - D \cdot \varepsilon)$ with reference to Fig. 1 where α - galvanometer readings, K = bridge sensitivity

(2)

$$K = \frac{i_1}{c_i \left[1 + n + p \frac{1 + m}{m}\right]}$$

D = a non-linearity factor defined by

Card 1/4 5

[redacted], Alojzy

Analysis of the compensating circuit for measuring magnetic fields with standard coil. Rozpr elektrotech 10 no.4:619-674 '64.

1. Department of Electric Measurements of the Technical University, Gdansk.

L 38133-65 EWT(d)/EEC(k)-2/EEC-4 Po-4/Pq-4/Pg-4/Pk-4/Pl-4
ACCESSION NR: AP5006978 P/0034/65/000/002/0068/0071

AUTHOR: Spichalski, A. (Doctor of technical sciences)

TITLE: Contribution to the proposal of standards for ohmmeters

SOURCE: Pomiary, automatyka, kontrola, no. 2, 1965, 68-71

TOPIC TAGS: Ohmmeter, resistance measurement, electromagnetic meter, parallel ohmmeter, series ohmmeter

ABSTRACT: The object of this paper was to suggest some corrections and additions to the technical requirements contained in the proposal of standards for ohmmeters. The proposed standards relate to electromagnetic, pointer-type, direct-reading ohmmeters having mechanical restoring torque. The corrections and additions are arrived at on the basis of the general theory of this type of ohmmeters, which is presented in the paper for both series and parallel types. The relationship existing between the deflection error and the error of the measured value of the resistance is analytically examined and formulas for this relationship for several types of ohmmeter scale are derived and tabulated. The relationship between the measurement range and the scale indication range is also investigated analytically. The effect of variations in the internal resistance of the power supply is also examined analytically for parallel and series types of ohmmeters.

Card 1/2

L 38133-65
ACCESSION NR: AP5006978

0

Orig. art. has: 4 figures, 1 table and 35 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: EE

NO REF SOV: 001 OTHER: 004

mc
Card 2/2

KOSAREV, A.N., SPICHKINKO, A.N.

Vertical stability of the waters of the middle and southern parts of the Caspian Sea. Okeanologiia 4 no.3:412-417 '64
(MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

SPICHENKO, D.A., starshiy nauchnyy sotrudnik (g. Kokchetav)

Method for killing brown rats. Zashch. rast. ot vred. i bol. 7 no.1:41-42 '62. (MIRA 15:6)

1. Severnyy filial Kazakhskogo instituta zashchity rasteniy. (Rats—Extermination)

LIVENTSEV, N.M.; ABRIKOSOV, I.A.; SPICHENKOV, M.N.

Construction of an apparatus for local d'arsonvalization with an electron-tube circuit. Med.prom. no.3:31-35 Jl-S '55. (MLRA 9:12)

1. Institut fizioterapii Ministerstva zdravookhraneniya RSFSR.
(ELECTROTHERAPY, apparatus and instruments,
for local d'arsonvalization with electronic lamp)

L 1346-66 EWT(d)/EWT(m)/EWP(k)/EWA(c)/EWP(h)/EWP(h)/T/EWP(l)/EWP(v)/EWP(t)
ACCESSION NR: AP5024381 JD/HM UR/0286/65/000/015/0066/0066
621.791.034
621.791.948

AUTHOR: Norenko, V. P.; Spichenok, N. I.

TITLE: A gas-arc cutting torch. Class 21, No. 173356

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 66

TOPIC TAGS: metal cutting, arc welding, inert gas welding

ABSTRACT: This Author's Certificate introduces a gas-arc cutting torch which contains a housing with a clamp for a tungsten electrode. The electrode is protected by an inert or neutral gas. The unit has a cutting tip and a nozzle. The cutting arc is cooled and stabilized by equipping the torch with a choke pipe which has a water suction tube for throttling a jet of air and water.

ASSOCIATION: Kramatorskiy nauchno-issledovatel'skiy i proyektno-tekhnologicheskiy institut mashinostroyeniya (Kramatorsk Scientific Research, Design and Planning Institute of Machine Building)

SUBMITTED: 25Nov63 ENCL: 01 SUB CODE: IE
NO REF SOV: 000 OTHER: 000

Card 1/2

L 16523-66 EWT(m)/T/EWP(v)/EWP(t)/EWP(k) IJP(c) JD/HM
ACC NR: AP6006186 (N) SOURCE CODE: UR/0135/66/000/002/0029/0031

63
B

AUTHOR: Norenko, V. P. (Engineer); Spichenok, N. I. (Engineer)

ORG: Kramatorskiy NIIPTMaSh

TITLE: Plasma cutting with an air-water stabilized arc

44,55,14

SOURCE: Svarochnoye proizvodstvo, no. 2, 1966, 29-31

TOPIC TAGS: plasma jet, cutting tool, austenitic steel, aluminum alloy, metallographic examination

4

ABSTRACT: A plasma cutting apparatus was used to cut 1Kh18N9T steel of 3-60 mm thickness and aluminum alloys AMg6, AD1 and AMts of 8-80 mm thickness. Compressed air and water were fed separately into an expansion chamber and passed into an injector at 240-260 mm Hg pressure and argon was intermixed to form the plasma gas mixture. In addition to stabilizing the arc, this mixture cooled the work piece and reduced the heat and ultraviolet emissions of the arc. A sectional drawing of the plasma cutter is given and the cutting is described in detail. Two variations of nozzle and electrode chamber were used: (1) for currents of 300-350 a with choking of the air-water mixture by adiabatic expansion and (2) for currents of 700-

UDC: 621.791.945.55

Card 1/2

Card 2/2

SPICHKIN, G., kandidat tekhnicheskikh nauk.

Determining the mechanical condition of engines without dismantling. Avt.transp. 33 no.3:15-17 Mr '55.(MLRA 8:5)
(Automobiles - Engines)

SPICHKIN, G., kandidat tekhnicheskikh nauk.

Is it worthwhile to change pistons and piston rings repeatedly?
Avt.transp. 34 no.2:16-18 F '56. (MLRA 9:7)
(Pistons)

SPICHKIN, G.

BOROVSKIY, B., dots.; SPICHKIN, G., kand. tekhn. nauk.

"Servicing GAZ-51 and ZIL-150 motortrucks" by B.V. Ershov, M.V. Zaletaev, A.M. Ul'ianetskii. Reviewed by B. Borovskii, G. Spichkin. Avt. transp. 36 no.2:39 F '58. (MIRA 11:2)
(Motortrucks--Maintenance and repair)
(Ershov, B.V.) (Zaletaev, M.V.) (Ul'ianetskii, A.M.)

RUSSEL, Sir Edward John, 1872- SPICHKIN, I.M.[translator]; REMEZOV, N.M., redaktor

[Soil conditions and plant growth. Translated from the English] Pochvennye usloviia i rost rastenii. Perevod s angliiskogo I.M. Spichkina. Pod obshchey red. i s predisl. N.M.Remezova. Moskva, Izd-vo inostrannoi lit-ry, 1955 623 p. (MLRA 10:1)
(Growth (Plants)) (Soils)

SHRENK, V.[Schrenk, W.]; MITCHELL, Kh.[Mitchell H.]; SILKER, R.[Silker,R.]; GRENDFILD, K.[Grandfield, D.]; KHONSTED, V.[Honstead, W.]; TEKKER, R.[Taecker R.]; BLOKHIN, L.F.[translator]; SPICHKIN, I.M., redaktor; SMIRNOVA, N.I.,tekhnicheskiy redaktor

[Alfalfa meal production; translated from the English] Proizvodstvo liutsernovoi muki. Perevod s angliiskogo L.F. Blokhina. Moskva, izd-vo inostrannoi lit-ry, 1956. 73 p. (MLRA 10:4)
(Alfalfa)

SPICHKIN, I.M.

[illegible], P.I.; RESNICHENKO, S.S., GERASHCHENKO, Ye.I.; SEDOYUK, V.[illegible]; SHISARENKO, N.V.; KOBARCV, V.A.; SPICHKIN, I.M.; GORBACHEV, Ye.[illegible]; UVAROVA, A.F., tekhnicheskiy redaktor.

[Spare parts for the S-4 self-propelled combine; a reference catalog] Zapasnye chasti samokhodnogo kombaina S-4; spravochnik-katalog. Moskva, Gos.nauchno-tekhnicheskoe izd-vo machinostroit.lit-ry, 1956. 179 p. (MLRA 9:5)

(Combines (Agricultural machinery))

RABOTNOV, T.A., doktor biologicheskikh nauk, otvetstvennyy redaktor; SPICHKIN, I.M., redaktor; NIKIFOROVA, A.N., tekhnicheskiy redaktor

[Use and improvement of hay fields and pastures; a collection of articles from foreign periodical literature] Ispol'zovanie i u..achshenie senokosov i pastbishch; sbornik perevodov iz inostrannoi periodicheskoi literatury. Otv. red. T.A.Rabotnov. Moskva, Izd-vo inostrannoi lit-ry, 1956. 474 p. (MLRA 9:11)
(Pastures and meadows)

BORINEVICH, V.A., kand. sel'skokhozyaystvennykh nauk, red., SPICHKIN, I.M.,red.; IOVLEVA, N.A., tekhn. red.

[Harvesting grasses for hay and dried green fodder; collection of translations from foreign periodical literature] Uborka trav na seno i sukhoi zelenyi korm; sbornik perevodov iz inostrannoi periodicheskoi literatury. Moskva, Izd-vo inostr. lit-ry, 1958. 539 p. (MIRA 11:10)

(Hay)

SHKONDE, E.I., kand. sel'khoz. nauk; SPICHKIN, I.M., red.; PROKOF'YEVA, L.N., tekhn. red.

[Liquid nitrogen fertilizers and their use; collection of articles translated from foreign periodical literature] Zhidkie azotnye udobreniia i ikh primenenie; sbornik perevodov iz inostrannoi periodicheskoi literatury. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1961. 438 p. (MIRA 14:7)

(Fertilizers and manures) (Nitrogen compounds)

SPICHKIN, V. (Dolinskiy rayon, Sakhalinskoy oblasti); LOBANOV, P.

Decisions of the Fourth All-Union Congress of the All-Union Volunteer Society for Assistance to the Army, Air Force, and Navy are being put into effect. Voen. znan. 34 no.7:10-11 Jl '58. (MIRA 11:9)

1.Predsedatel' komiteta pervichnoy organizatsii dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu Starodubskogo rybnogo kombinata (for Spichkin). 2.Starshiy inspektor TSentral'nogo Komiteta dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR (for Lobanov).
(Military education)

ACC NR: AT6023361 (N) SOURCE CODE: UR/3174/65/000/055/0031/0033

AUTHOR: Spichkin, V. A. (Candidate of geographical sciences)

ORG: Arctic and Antarctic Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut)

TITLE: Are supercooled waters possible in the Antarctica?

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955- Informatsionnyy byulleten', no. 55, 1965, 31-33

TOPIC TAGS: oceanography, antarctic climate, ~~oceanology, ocean water, ocean water supercooling paradox, antarctic ocean water, antarctic ocean water sampling~~, bathometer/AANII bathometer, GMP-48 bathometer

ABSTRACT: The author considers as unbelievable the observations of some oceanographers who noted in the viscinity of antarctic shelve glaciers the presence of water masses with a temperature under their freezing temperature by a magnitude reaching -.12°C. Explanation of this supercooling paradox is sought by the author in a deficient water sampling/temperature measuring methodology. It is found and explained that the noted supercooling of the Antarctic water masses is fictituous and is due to a methodological error of sampling suspended ice crystals with the water. The crystals later partly dissolve and decrease the water salinity readings made on board ship. For a proof, samples of sea water were taken at Mirny June 22, 1964 using two sampling methods: 1)

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conventional bathometer AANII, 2) bathometer GMP-48 with inlets covered by filters made of silk plankton net. The filtered samples showed zero supercooling.

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Criteria of the quality of methods used in forecasting ice phenomena. Probl. Arkt. i Antarkt. no.9:5-15 '61. (MIRA 15:1)
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MEDVEDEV, B.P., kand. tekhn. nauk, dotsent; MALYSHEVA, N.I., kand. tekhn. nauk, ispolnyayushchiy obyazannosti dotsenta; SPICHKIN, Ye.G., student

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1. Kafedra elektrotekhniki Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

SAPOTNITSKIY, S.A.; GLUSHCHENKO, N.V.; Prinimali uchastiye: SPICHKINA, T.G.; RUDENKO, T.A.

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SAPOTNITSKIY, S.A.; GLUSHCHENKO, N.V.; SPICHKINA, T.G.

Combining the processes of the blowing and evaporation of sulfite liquor. Gidroliz. i lesokhim. prom. 16 no.4:3-4 '63. (MIRA 16:7)

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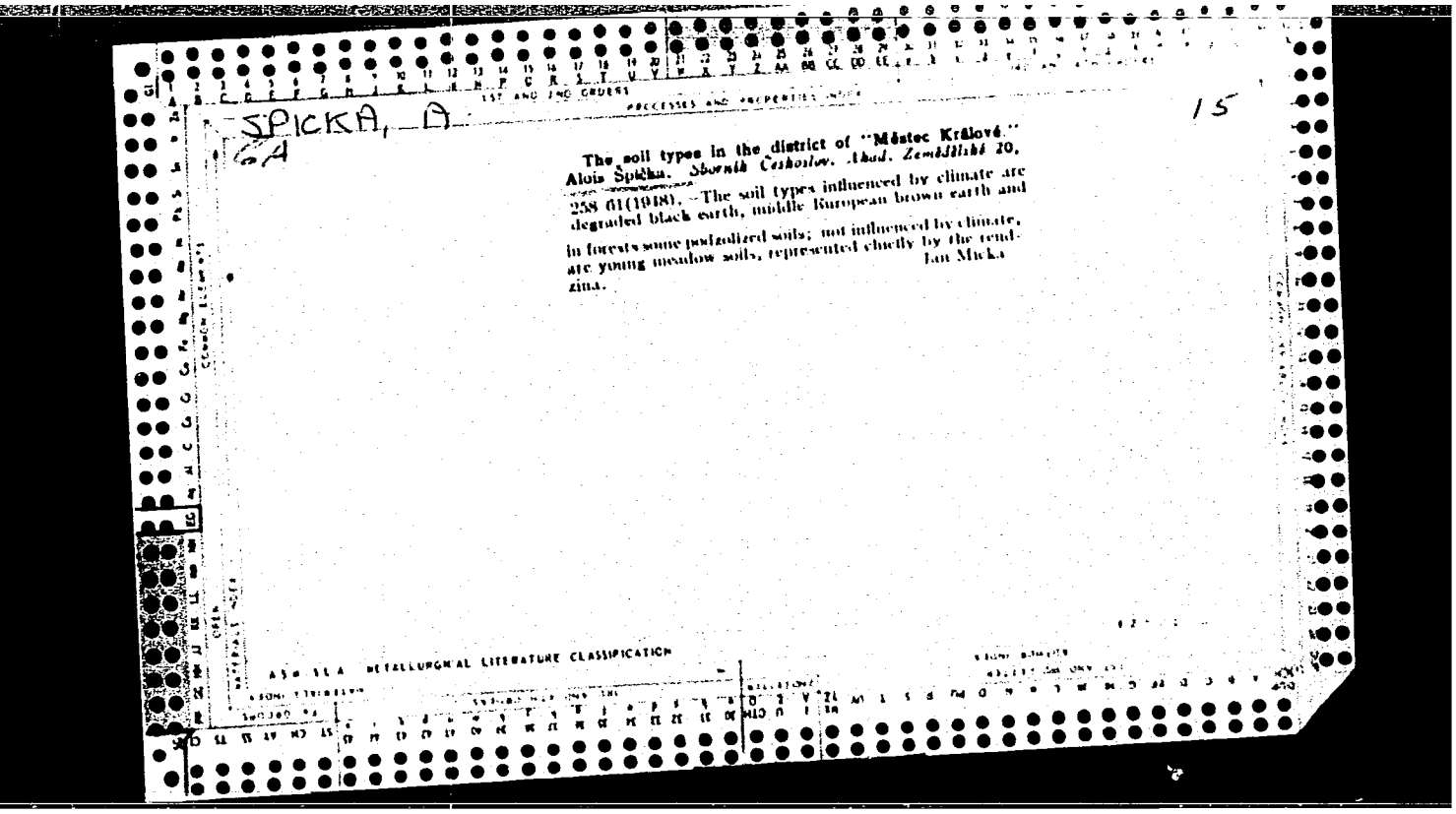
(Sulfite liquor)



SPICKA, A.

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15

The soil types in the district of "Městec Králové."
Alois Špička. *Sborník Československ. Akad. Zemědělské* 20, 258-61(1948).—The soil types influenced by climate are degraded black earth, middle European brown earth and in forests some podzolized soils; not influenced by climate, are young meadow soils, represented chiefly by the rendzina.
Jan Micka

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Effects of natural factors on plowing resistance. I. An investigation of plowing values. p. 149.

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